

FACT SHEET

as required by LAC 33:IX.3111 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0066559; AI 19041; PER20090002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Utilities, Inc of La
 Arrowwood Regional WWTP
 201 Holiday Blvd., Suite 150
 Covington, LA 70433

- II. **PREPARED BY:** Angela Marse

- DATE PREPARED:** April 7, 2010

- III. **PERMIT ACTION:** reissue LPDES permit LA0066559, AI 19041; PER20090002

- LPDES application received: March 30, 2009
 LPDES permit issued: December 1, 2004
 LPDES permit expired: November 30, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving numerous residential developments and commercial users in Covington and surrounding areas.

- B. The permit application does not indicate the receipt of wastewater from any categorical industrial users.

- C. The facility is located North of the intersection of Harrison Road and Cherokee Drive in Covington, St. Tammany Parish.

- D. The treatment facility consists of an equalization basin and circular extended air activated sludge mechanical plant. Disinfection is by ultraviolet light.

- E. Outfall 001
 - Discharge Location: Latitude 30° 28' 11" North
 Longitude 90° 3' 10" West

 - Description: treated sanitary wastewater

 - Expected Flow: The facility is increasing it's expected flow. See Section IX., Proposed Limits. The following estimates are based on customers/users identified in the application and figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

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4098 homes x 400 gallons/day/home (gpd)	= 1,639,000
308 one bedroom homes x 250 gpd	= 77,000
402 two bedroom homes x 300 gpd	= 120,600
132 three bedroom homes x 400 gpd	= 52,800
2 hospitals with 2740 beds x 200 gpd	= 54,000
8 hotels with 812 rooms x 100 gpd	= 81,200
30 restaurants with 3,512 seats x 50 gpd	= 175,600
5 service stations x 250 gpd	= 1,250
5 car washes x 1000gpd	= 5000
176 light commercial businesses x 50 gpd	= 8,800
	<u>2,215,450</u>

Attachment A submitted with the application outlines the treatment facility's capacity engineering evaluation. The evaluation indicates the design capacity of the facility is 2 MGD. (This is an increase above the expected flow from the previous permit of 1.6 MGD.) A letter from the Department of Health and Hospitals dated January 26, 2009 concurs with the calculations in the report.

According to LAC 33:IX.2709.B.2., other than POTW's, permit limitations shall be based upon actual production of the facility not upon the designed production capacity. However, the state may include a condition establishing alternate limitations based upon an anticipated increase or decrease of production, but not to exceed the maximum production capability. Effluent loading limits are based on production of 2 MGD. (This is also the design capacity of the facility.)

Type of Flow Measurement which the facility is currently using:
Combination Totalizing Meter / Continuous Recorder

V. RECEIVING WATERS:

The discharge is into the Abita River, thence into the Bogue Falaya, thence into the Tchefuncte River in segment 040804 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the Abita River is 0.9 cfs.

The **hardness value** is 25 mg/l and the **fifteenth percentile value for TSS** is 7.6 mg/l.

The designated uses and degree of support for Segment 040804 of the Lake Ponchartrain Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040804 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

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Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, requires that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040804 of the Lake Pontchartrain Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury, chlorides, and pathogens. To date no TMDLs have been completed for this waterbody. A reopener clause has been included in the permit should the TMDLs require effluent limitations be placed in the permit. Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Mercury

The named waterbody in segment 040804 (Bogue Falaya) is impaired for mercury. The source of mercury has been identified as atmospheric deposition. This discharge is directly into the Abita River. A review of the application indicates a few commercial users (dentists, medical clinics, etc.) that could potentially contribute to the receiving waterbody's mercury impairment. For these reasons, the Arrowwood Regional Wastewater Treatment Plant will be required to develop a Mercury Minimization Program Plan (MMPP). It is the position of this Department that development and implementation of a Mercury Minimization Program Plan (MMPP) continues to be the most efficient reduction of mercury discharges to surface waters of Louisiana. Pollution prevention and waste minimization are more reasonably accomplished and cost productive than the implementation of controls and technologies to meet such stringent end-of-pipe mercury limitations. The MMPP employs EPA approved analytical methods (*EPA Methods 1631, 245.7*) through effluent sampling and system wide monitoring programs to locate and identify potential sources of mercury in the treatment system. Once identified the MMPP integrates cost-effective reduction controls (either treatment or prevention based) to reduce or eliminate mercury from the source. Should the TMDL for mercury determine a mercury effluent limitation is necessary, a reopener clause has been included in the draft permit. Data collected from monitoring required by the MMPP may help Arrowwood evaluate compliance with any final mercury TMDL.

Chlorides

Chlorides are a suspected cause of impairment. This impairment is not attributed to sanitary wastewater according to the 305(b) List. A TMDL will determine if effluent limitations are required of sanitary wastewater treatment plants. A reopener clause has been included in the permit should the TMDL require effluent limits from point source dischargers.

Pathogen Indicators

Monitoring for fecal coliform is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against potential receiving water impairments due to pathogens, fecal coliform limits have been established in the permit. Permit limits are reflective of water quality standards for primary contact recreation, a designated use of the receiving stream.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040804 of the Lake Ponchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the *Gulf sturgeon* and the *Louisiana quillwort*, which is listed as a threatened/endangered species. LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the *Gulf sturgeon* or the *Louisiana quillwort* since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. As set forth in the Memorandum of Understanding between the LDEQ and the FWS, LDEQ will consult with FWS. The draft permit has been sent to the FWS for review.

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VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Effluent Limits:****OUTFALL 001**

Segment 040804, the Bogue Falaya River (from headwaters to the Tchefuncte River), is designated for primary contact recreation, secondary contact recreation, and the propagation of fish and wildlife. Segment 040804 is designated a scenic stream from the confluence of the East and West Prong to La. Hwy. 437, north of Covington. The Abita River (which flows into the Bogue Falaya) is not designated as an outstanding natural resource waterbody (ONRW) nor is it part of a national or state wildlife refuge. At present, the subsegment does not meet the designated use of propagation for fish and wildlife since it is impaired for chlorides and mercury (2006 303(d) List) due to atmospheric deposition and drought related impacts. As discussed in Section V, a Mercury Minimization Program Plan is also required by the permit to reduce the introduction of mercury into the collection system and treatment works. The subsegment does not meet the primary contact recreation use since it is impaired for pathogens due to decentralized wastewater treatment plants and permitted smaller flow discharges. The permit contains fecal coliform effluent limits set at the standard for primary contact recreation.

The facility has increased its design capacity to 2 MGD. The facility has added 826,839 gallons of aeration, 220,334 gallons of clarifier space, and 180,000 gallons of digester in the form of a separate mechanical treatment plant. The facility consists of 2-1MGD circular extended air activated sludge plants.

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Louisiana has an EPA approved antidegradation policy found at LAC 33.IX:1109. The policy states that no lowering of water quality will be allowed in waters where standards for the designated water uses are not currently being attained. The policy further states the administrative authority will not approve any wastewater discharge or certify any activity for federal permit that would impair water quality or use of state waters. Waste discharges must comply with applicable state and federal laws for the attainment of water quality goals. Any new, existing, or expanding point source or nonpoint source discharging into waters of the state,...will be required to provide the necessary level of treatment to protect state waters. Additionally, no degradation shall be allowed in high-quality waters that constitute outstanding natural resources, such as waters in the Louisiana Natural and Scenic Rivers Systems or waters of ecological significance as designated by the Department.

Although the Abita River is not an outstanding natural resource waterbody, it is a tributary of the Bogue Falaya River which is an outstanding natural resource waterbody. Any additional loading from the increase in expected flow from the Arrowwood Wastewater Treatment Facility can not impact the Bogue Falaya River. The previous permit was based on an expected flow of 1.6 MGD. As stated previously, Arrowwood WWTP has upgraded their facility.

Having additional treatment capacity allowed Arrowwood to assume control of the collection system for St. Tammany Parish Sewer District No. 6 (September, 2009). In addition to wastewater from Sewer District No. 6, Arrowwood WWTP has accepted flows from previously existing wastewater treatment package plants in the area serving Ingram Estates and Northpark. Some new commercial developments as well as an apartment complex were also added to Arrowwood's collection system. The design capacity for District No. 6 was 0.3 MGD. DMRs for District No. 6 show a weekly average flow of 0.369 MGD. Flows from Ingram Estates and Northpark are estimated at 0.220 MGD.

This brings the expected flow of the plant to approximately 2.2 MGD. As stated in IV.E, loadings are based on maximum production rate which is the design capacity of 2MGD. Loadings from existing dischargers have been transferred from smaller package treatment plants to a regional facility with stringent effluent limitations and permit conditions. The effluent loading limits for Arrowwood have increased in the draft permit. However, the net loading to the receiving stream has decreased given better treatment and more stringent limits for nutrients. By continuing to meet permit limits set at State water quality standards, no further degradation of the receiving waterbody should occur from this discharge.

A compliance schedule with interim limits for whole effluent toxicity (WET) limits is proposed in the permit. Interim limits shall become effective on the effective date of the permit and expire two years from the effective date of the permit. All other effluent limits listed below apply during the interim and final periods.

Final limits shall become effective two years from the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
CBOD ₅	167	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP)/St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
TSS	250	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
				case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	67	4 mg/l	8 mg/l	BPJ based on the previous permit effluent limit. Limits based on toxicity concerns of the USEPA Region 6 for all majors.

Priority Pollutants

Effluent Characteristics	Monthly Avg. (lbs./day)	Daily Maximum (lbs./day)	Basis
Total zinc	0.84	2	Water Quality Based Effluent Limit. ¹

¹ The limit for Total zinc has increased since the design capacity/expected flow has increased and zinc is not a suspected cause of impairment for the receiving stream.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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4) Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, October 2009, VERSION 7). Whole effluent toxicity testing is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics.

Based on information contained in the permit application and a review of biomonitoring test results required by the previous permit, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. Testing since the issuance of the previous permit shows the permittee complied with the biomonitoring requirements contained in LA0066559. The permittee experienced 3 lethal and 3 sub-lethal failures to the *Ceriodaphnia dubia*, and 2 lethal and 2 sub-lethal failures to the *Pimephales promelas* during the last five years.

Because of lethal and sublethal failures, a WET limit is established in the proposed permit to meet narrative criteria. Narrative criteria states that 'No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life ...' (LAC 33:IX.1113.B.5). A two year interim period is included in the permit to allow for compliance with the WET limit.

The toxicity test procedures stipulated as a condition of this permit are listed below.

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No LA0066559 **Section D** for the organisms indicated below.

TOXICITY TESTS**FREQUENCY**

Chronic static renewal 7-day survival & reproduction test
using *Ceriodaphnia dubia* (Method 1002.0)

1/quarter

Chronic static renewal 7-day survival & growth test
using fathead minnow (*Pimephales promelas*) (Method 1000.0)

1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 25%, 33%, 44%, 58%, and 77%. The whole effluent toxicity limit (critical low-flow dilution) is defined as 77% effluent. The critical dilution is calculated in Appendix A-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in **Section D** under Whole Effluent Toxicity Testing. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in **Section D** of the permit.

See attached Biomonitoring Recommendation for more information.

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X. PREVIOUS PERMITS:

LPDES Permit No. LA0066559: Issued: December 1, 2004
Expired: November 30, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations*</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/week	6-hr.composite
TSS	15 mg/l	23 mg/l	2/week	6-hr.composite
Ammonia-Nitrogen	4 mg/l	8 mg/l	2/week	6-hr.composite
Fecal Coliform Colonies	200	400	2/week	Grab
pH	---	---	2/week	Grab
Total Zinc	0.7lb/day	1.663lb/day	1/quarter	24-hr.composite

The permit contains biomonitoring.

The permit contains stormwater language.

*Final effluent limits. A three year interim period was allowed for compliance with zinc and more stringent ammonia limits. During the interim period the facility reported Zinc loadings and the monthly average effluent limit for ammonia was 5 mg/l. The weekly average was 10mg/l.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following most recent inspection was performed for this facility.

Date: June 24, 2009

Inspector: April Baiamonte

Findings and/or Violations:

1. The inspection was conducted in response to an incident. Access to the Abita River was obtained through a walking trail in the woods on the south side of Kustenmacher Road. Solids were observed in the River. This area of the River was darker in color and contained settled solids as well as solids bubbling from under the surface. An inlet to the River and a discharge pipe was located in the proximity. An inspection of this facility and interview with representatives revealed the pipe located in the River was for the facility.

2. The effluent chamber was free of solids. Samples were collected and results were within permit limits.

B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility. However, warning letters were sent to the facility in September and December, 2008.

C) DMR Review

A review of the discharge monitoring reports for the period beginning August, 2007 through July, 2009 has revealed the following violations.

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Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS	001	September, 2009	15 mg/l	40 mg/l
TSS	001	September, 2009	23 mg/l	40 mg/l
Fecal coliform	001	October, 2009	200col/100ml	480 col/100ml
Fecal coliform	001	October, 2009	400col/100ml	480 col/100ml
Fecal coliform	001	September, 2008	200col/100ml	1360col/100ml
Fecal coliform	001	September, 2008	400col/100ml	1360col/100ml
Fecal coliform	001	January, 2008	200col/100ml	424col/100ml
Fecal coliform	001	January, 2008	400 col/100ml	424col/100ml
Zinc	001	September, 2009	0.7lb/day	1.29lb/day
Zinc	001	September, 2009	1.66 lb/day	1.9lb/day
Zinc	001	August, 2009	0.7 lb/day	1.174 lb/day
Zinc	001	February, 2008	0.7 lb/day	0.829 lb/day
Zinc	001	August, 2007	0.7 lb/day	1.1 lb/day

September, 2009 excursions noted above are associated with Hurricane Gustav. Several power outages and electrical control failures were experienced as a result of the storm. In addition to the excursions listed in the table above, the facility also reported numerous unauthorized discharges of raw wastewater. Unauthorized discharges are summarized below.

EDMS Doc. No.	Date	Amount (gallons)	Location
43621942	9/28/09	68,000	N. Causeway Blvd.
43607862	9/24/09	<1000g	N. Causeway Blvd.
43607897	9/16/09	<100g	Bradford Ct.
43607911	9/20/09	<100g	Red Bud Ct.
42791441	8/10/09	<100g	Maples Ridge Way
42047556	6/22/09	<100g	Rutherford Drive
42044089	6/16/09	<150g	Helenburg Road
42138009	6/3/09	<1000g	Crestwood Blvd.
40773309	3/21/09	2000g	Helenburg Road
39500862	1/2/09	5000g	Lionel Ct.
39141136	12/2/08	200g	Redbud Ct.
37898427	8/26/08	<100g	Tradition Ct.
37898443	8/14/08	undetermined	Hwy. 21 along Flower Bayou
37898449	8/13/08	<500g	13 th Street along Hwy. 190
37048704	6/11/08	200g	Pine Oak Drive
36891462	5/15/08	150g	Winterberry
36891464	5/14/08	100g	Robin Hood
36891450	5/12/08	300g	Lionel Ct.
36889174	4/29/08	100g	Helenburg Road
36891410	5/6/08	200g	Rutherford
36891426	5/1/08	500g	Helenburg Road
36751322	3/29/08	600g	Louis Quatrose
36714148	3/13/08	18,000g	Merlot Drive
36714174	3/13/08	45,000g	Merlot Drive & S. 11 th Street
36714244	3/1/08	1000g	Robin Hood
36661608	3/5/08	50g	Emeral Forest Blvd.
36659922	2/19/08	300g	Emerald Oaks
36659924	2/21/08	1000g	Helenburg
36613482	2/15/08	250g	Maple Ridge Way
36613484	2/13/08	300g	Park Place
36560458	1/21/08	200g	Emerald Forest Blvd.

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Additional information was submitted November 30, 2009 addressing overflows. This documentation demonstrates Arrowwood's willingness to achieve compliance. The document specifically focuses on 1) operation and maintenance and 2) capital improvements to reduce overflows.

Regarding proper operation and maintenance, periodic inspections and on-going evaluations of facilities are performed frequently. Daily inspections are conducted by field staff and compliance inspections are conducted periodically. An inspection of all lift stations was most recently conducted October 28-29, 2009. Several findings were documented. These included revisions to log sheets to document more information such as pump run times and checks for alarm equipment, several primary lift stations need additional telemetry, maintenance performed by outside contractors should be accompanied by company personnel, control floats should be inspected and cleaned on a daily basis, and alarm controls should be checked weekly.

Regarding capital improvements, the Company has recently evaluated the Highway 190 sewer collection system for improvements. Currently, they are focused on the bottleneck created by the 12" force main running to Arrowwood and removal of the Helenburg lift station. While some phases of the project (bigger sewer lines) are complete some others are not (abandonment of Helenburg lift station.) The Facility has been referred to the Office of Environmental Compliance/Enforcement Division for the unauthorized discharges.

XII. ADDITIONAL INFORMATION:**REOPENER CLAUSE**

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

EFFLUENT LOADINGS:

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the expected flow of 2 MGD.

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Effluent loadings are calculated using the following example:

$$\text{CBOD: } 8.34 \text{ lb/gal} \times 2 \text{ MGD} \times 10 \text{ mg/l} = 167 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 1 MGD and 5 MGD.

COMPLIANCE SCHEDULE

The permittee shall achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule:

ACTIVITY	EFFECTIVE DATE
Achieve Interim Effluent Limitations and Monitoring Requirements	Effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements	Two years from the effective date of the permit

The permittee shall achieve compliance with the final effluent limitations specified for **whole effluent toxicity limits** within two years of the effective date of this permit

The permittee shall initiate and continue ongoing activities designed to achieve sustained compliance with final effluent limitations for **whole effluent toxicity limits** no later than two years after the effective date of this permit.

The permittee shall submit a progress report outlining the status of the activities on a yearly basis (from the effective date of the permit) until the final whole effluent toxicity (WET) limitations are effective.

No later than fourteen calendar days following the date for compliance for **whole effluent toxicity limits** the permittee shall submit a written notice of compliance or noncompliance.

ENVIRONMENTAL IMPACT QUESTIONNAIRE**Applicant Comments/Responses (verbatim from applicant)**

1. Have the potential and real adverse effects of the proposed facility been avoided to the maximum extent possible?

The present treatment facility was constructed on the site in 1996. The facility serves a moderate sized population based with single-family residences, multi-family, and small commercial businesses located in and around the Highway 190 corridor. The plant discharges into the Abita River and flows to the Bogue Falaya River and on to the Tchefuncte River and finally to Lake Pontchartrain. Actual adverse impacts are the organic, nutrient, and hydraulic loadings placed on the receiving bodies of water.

Potential adverse environmental effects include a catastrophic failure of either of two above-ground steel tanks which would allow untreated domestic wastewater to flood the immediate area before running off into the Abita River. Human health is protected from a tank failure by conducting periodic maintenance of the tanks and equipment including visual inspections, preventive maintenance, sandblasting and painting of all exposed surfaces every five years, and prompt repairs as needed.

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There is unlikely to be any impact to the drinking water supply, groundwater in or under the site, soil properties, or air quality as a result of renewing the existing permit.

2. Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

The above referenced service area could modify the service area and convert the customers to individual treatment plants. This is not practical because of the treatment efficiency, numerous outfalls to the drainage ditches, and poor maintenance and upkeep by the owners of the systems. The small lot sizes in several subdivisions preclude the use of septic tanks for sewage treatment. Small business would have small package plants increasing to the amount of discharges to drainage ditches and water bodies.

In contrast, the continued operation of the existing treatment plant as specified in the Discharge Permit will provide the most cost effective and environmentally acceptable means of treating the total daily wastewater flow produced by the residents and commercial property in the service area of the wastewater treatment plant. If in the future, nearby undeveloped property should be developed and improved, the existing treatment plant would be the most appropriate means of providing wastewater treatment to the new area because no additional point discharge would be created. The renewal will also help St. Tammany Parish in striving for high treatment efficiency and fewer discharge points.

This permit renewal application is for an existing facility; no new facilities would be constructed at this time. The existing facility has an established record of performance that shows the plant can consistently operate at a high level of treatment efficiency. The effluent water quality consistently meets or exceeds the proposed discharge limits which minimize the impact on the receiving bodies of water.

3. Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

Alternatives to a renewal of the discharge permit include: 1)pump raw wastewater to a newly constructed facility and take the existing plant out of service; 2)pump the raw wastewater to another existing facility, if available, and mothball the existing plant; or 3)provide individual treatment units for each customer and abandon the existing collection and treatment facilities.

Alternative 1 is not environmentally or economically feasible for the following reasons: water quality produced at a new facility would not be better than that produced at the existing plant; the impact on the receiving stream and thence on to Lake Pontchartrain would not be improved; the selection of another site for a treatment plant would require overcoming local opposition; and St. Tammany Parish development policy is in opposition to that option. Alternative 2 is not an option since there is no nearby treatment plant. Alternative 3 would result in a negative impact on the surface drainage system in the area because poorly maintained system would be bypassed or cease to function properly. Over time, the number and frequency of improper discharges would increase, and lacking any programmatic oversight of their operation, increasing amounts of nutrients would flow into receiving streams and negatively impact its water quality.

4. Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits?

No alternative sites have been considered. This because the existing site has been shown to be appropriate and satisfactory for the years it has been used. The land surrounding the facility offers space to keep upgrading the facility as necessary to provide protection to the environment and meet the population expansions within the region.

5. Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing nonenvironmental benefits?

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No, the proposed effluent water quality limits for the existing facility are no less stringent than any other treatment facility located in St. Tammany Parish and discharging into a receiving stream. In addition, Utilities Inc. of Louisiana has a proven performance record in regards to the operation of wastewater treatment systems in St. Tammany Parish, having been in business here since 1982. The Permittee possesses the resources and resolve to operate and maintain its systems according to Louisiana and federal laws and regulations. In addition, all of our staff are duly certified by the state of Louisiana Public Service Commission has historically authorized a schedule of user fees sufficient to allow for the proper operation of the facilities.

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Fact Sheet.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2009.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2009.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Utilities Inc of La, Arrowwood Regional WWTP, March 30, 2009.